Claim Amendments

1. (currently amended) An apparatus, comprising:

a card guide that comprises a plurality of card guide portions that serve to guide a circuit board into a chassis, wherein the plurality of card guide portions comprise a first card guide portion and a second card guide portion;

wherein the first card guide portion serves to guide the circuit board substantially along a first direction during engagement of the circuit board with the first card guide portion;

wherein the second card guide portion serves to guide the circuit board substantially along a second direction that is nonlinear with the first direction during engagement of the circuit board with the second card guide portion;

wherein the chassis comprises an obstacle in a circuit board entrance of the chassis, wherein behind the obstacle is an open space in the chassis;

wherein the first card guide portion is angled to guide the circuit board in the first direction around the obstacle and into the open space to fill the open space with a portion of the circuit board.

2. (original) The apparatus of claim 1, wherein the first card guide portion serves to guide the circuit board towards the second card guide portion.

3. (original) The apparatus of claim 1, wherein the second card guide portion serves to guide the circuit board to an engagement of a first connector component of the circuit board with a second connection component of the chassis.

4. (original) The apparatus of claim 3, wherein the first connector component comprises a first electrical connector of the circuit board, wherein the second connector component comprises a backplane;

wherein the second card guide portion serves to guide the circuit board towards the backplane to electrically couple the first electrical connector with the backplane.

5. (original) The apparatus of claim 1, wherein the first direction is oblique relative to the second direction.

6. (original) The apparatus of claim 1, wherein the second card guide portion serves to guide the circuit board in the second direction to align a first connector component of the circuit board with a second connection component of a backplane in the chassis.

7. (original) The apparatus of claim 6, wherein the first card guide portion serves to guide the circuit board in the first direction to prevent contact between the circuit board and the chassis.

8. (canceled)

9. (currently amended) The apparatus of claim 1, wherein the first card guide portion and the second card guide portion promote a clearance by the circuit board of ~~an~~ the obstacle in ~~a~~ the circuit board entrance of the chassis.

10. (currently amended) The apparatus of claim 1, wherein the ~~chassis~~ obstacle comprises a lip at the circuit board entrance of the chassis, wherein behind the lip is ~~an~~ the open space in the chassis;

wherein the first card guide portion serves to guide the circuit board in the first direction around the lip and into the open space to fill the open space with ~~a~~ the portion of circuit board.

11. (original) The apparatus of claim 1, wherein the second card guide portion supports the circuit board during an engagement of a connection component of the circuit board with a connection component of the chassis.

12. (original) The apparatus of claim 1 in combination with the circuit board, wherein the circuit board comprises one or more card guide pins on a side of the circuit board;

wherein during installation of the circuit board into the chassis, the card guide serves to guide the circuit board into the chassis through support of one or more of the one or more card guide pins on the side of the circuit board.

13. (original) The apparatus of claim 1 in combination with the circuit board, wherein the circuit board comprises one or more first card guide pins on a first side of the circuit board and one or more second card guide pins on a second side of the circuit board;

wherein the card guide comprises a first card guide on the first side of the circuit board and a second card guide on the second side of the circuit board;

wherein the first card guide supports one or more of the one or more first card guide pins on the first side of the circuit board, wherein the second card guide supports one or more of the one or more second card guide pins on the second side of the circuit board.

14. (original) The apparatus of claim 1, wherein the card guide comprises an installation path for the circuit board into the chassis, wherein the card guide comprises a bend in the installation path.

15. (original) The apparatus of claim 14, wherein during installation of the circuit board into the chassis, the circuit board slides along the first card guide portion in the installation path, through the bend in the installation path, and along the second card guide portion in the installation path.

16. (currently amended) The apparatus of claim 14, wherein the bend is between the first card guide portion and the second card guide portion;

wherein the bend creates an oblique angle between the first direction and the second direction.

17. (currently amended) The apparatus of claim 16, wherein the second card guide portion serves to align a first connector component of the circuit board with a second connection component of a backplane in the chassis;

wherein a degree of the oblique angle is based on a size of ~~an~~ the obstacle in the circuit board entrance of the chassis and a size of the circuit board, wherein the oblique angle is set so that upon installation of the circuit board with the chassis, the circuit board is free to pass around the obstacle.

18. (original) The apparatus of claim 1, wherein the card guide comprises a groove, wherein the groove runs through the first card guide portion and the second card guide portion;

wherein the groove serves to guide the circuit board through the first card guide portion and the second card guide portion.

19. (original) The apparatus of claim 18 in combination with the circuit board, wherein the circuit board comprises one or more card guide pins, wherein one or more of the one or more card guide pins engage with the grove to couple the circuit board with the card guide.

20. (original) The apparatus of claim 18 in combination with the circuit board, wherein the circuit board comprises one or more card guide pins, wherein one or more of the one or more card guide pins slide in the groove to guide the circuit board into the chassis.

21. (original) The apparatus of claim 1, wherein the card guide comprises an installation path for the circuit board into the chassis, wherein the card guide comprises a plurality of bends in the installation path;

wherein the plurality of bends serve to guide the circuit board substantially along a plurality of non-linear directions during installation of the circuit board into the chassis.

22. (original) The apparatus of claim 1, wherein the card guide comprises an installation path for the circuit board into the chassis, wherein the card guide comprises one or more curves in the installation path;

wherein the first card guide portion comprises a first portion of a curve of the one or more curves and the second card guide portion comprises a second portion of the curve;

wherein the first portion of the curve serves to guide the circuit board substantially along the first direction during engagement of the circuit board with the first portion of the curve;

wherein the second portion of the curve serves to guide the circuit board substantially along the second direction during engagement of the circuit board with the second portion of the curve.

23. (currently amended) An apparatus, comprising:

a circuit board that comprises one or more card guide pins; and

a card guide that receives one or more of the one or more card guide pins to guide the circuit board into a chassis;

wherein the chassis comprises an obstacle in a circuit board entrance of the chassis, wherein behind the obstacle is an open space in the chassis;

wherein the card guide comprises one or more bends, wherein one or more of the one or more card guide pins slide through the one or more bends in ~~a~~ the card guide ~~of a chassis~~ to guide the circuit board around ~~an~~ the obstacle ~~in the chassis~~ and into the open space to fill the open space with a portion of the circuit board.

24. (original) The apparatus of claim 23, wherein one or more of the one or more card guide pins protrude from one or more sides of the circuit board;

wherein the one or more of the one or more card guide pins that protrude from the one or more sides of the circuit board engage with the card guide to support the circuit board.

25. (original) The apparatus of claim 23, wherein the one or more of the one or more card guide pins that slide through the one or more bends in the card guide comprise a first card guide pin and a second card guide pin on a side of the circuit board, wherein the one or more bends in the card guide comprise a bend in the card guide;

wherein during installation of the circuit board into the chassis, the first card guide pin and the second card guide pin engage with a first card guide portion of the card guide on a first side of the bend;

wherein the first card guide pin and the second card guide pin slide on the first card guide portion on the first side of the bend to guide the circuit board substantially along a first direction.

26. (original) The apparatus of claim 25, wherein to guide the circuit board past the bend, the first card guide pin slides past the bend in the card guide to engage with a second card guide portion on a second side of the bend;

wherein the first card guide pin slides on the second card guide portion on the second side of the bend while the second card guide pin slides on the first card guide portion on the first side of the bend.

27. (original) The apparatus of claim 25, wherein to engage a connection component of the circuit board with a connection component of the chassis, the second card guide pin slides past the bend in the card guide to engage with the second card guide portion on the second side of the bend;

wherein the first card guide pin and the second card guide pin slide on the second card guide portion on the second side of the bend substantially along a second direction that is nonlinear with the first direction until engagement of the connection component of the circuit board with the connection component of the chassis.

28. (currently amended) The apparatus of claim 23 ~~in combination with the card guide~~, wherein the card guide comprises a bend of the one or more bends to provide an installation path around the obstacle in the chassis for the circuit board;

wherein the one or more of the one or more card guide pins slide past the bend in the card guide to prevent contact between the circuit board and the obstacle in the chassis during installation of the circuit board into the chassis.

29. (currently amended) An apparatus, comprising:

means for guiding a circuit board substantially along a first direction during engagement of the circuit board with the means for guiding the circuit board substantially along the first direction; and

means for guiding the circuit board substantially along a second direction that is nonlinear with the first direction during engagement of the circuit board with the means for guiding the circuit board substantially along the second direction;

wherein the means for guiding the circuit board substantially along the second direction serves to guide the circuit board to an engagement with a chassis;

wherein the chassis comprises an obstacle in a circuit board entrance of the chassis, wherein behind the obstacle is an open space in the chassis;

wherein the means for guiding the circuit board substantially along the first direction is angled to guide the circuit board in the first direction around the obstacle and into the open space to fill the open space with a portion of the circuit board.

30. (original) The apparatus of claim 29, wherein the means for guiding the circuit board substantially along the first direction serves to guide the circuit board towards the means for guiding the circuit board substantially along the second direction.

31. (currently amended) The apparatus of claim 29, wherein the means for guiding the circuit board substantially along the first direction serves to guide the circuit board around ~~an~~ the obstacle in the circuit board entrance of the chassis to prevent contact between the circuit board and the obstacle.

32. (original) The apparatus of claim 29, further comprising:

means for coupling the circuit board with the means for guiding the circuit board substantially along the first direction and the means for guiding the circuit board substantially along the second direction;

wherein the means for coupling the circuit board slide through the means for guiding the circuit board substantially along the first direction and the means for guiding the circuit board substantially along the second direction to the engagement with the chassis.

33. (currently amended) A method, comprising the steps of:

positioning a first portion of a card guide to guide a circuit board into a chassis in a first direction to prevent contact between the circuit board and the chassis; and

positioning a second portion of the card guide to guide the circuit board into the chassis in a second direction that is nonlinear with the first direction to engage a connection component of the circuit board with a backplane in the chassis;

wherein the chassis comprises an obstacle in a circuit board entrance of the chassis, wherein behind the obstacle is an open space in the chassis;

wherein the step of positioning the first portion of the card guide to guide the circuit board into the chassis in the first direction to prevent contact between the circuit board and the chassis comprises the step of:

positioning the first portion of the card guide at an angle to guide the circuit board around the obstacle and into the open space to fill the open space with a portion of the circuit board.

34. (canceled)

35. (original) The method of claim 33, wherein the circuit board comprises one or more card guide pins, the method further comprising the steps of:

engaging one or more of the one or more card guide pins with the first portion of the card guide; and

sliding the one or more of the one or more card guide pins through the first portion of the card guide in the first direction and through the second portion of the card guide in the second direction to engage the connection component of the circuit board with the backplane.

36. (new) The apparatus of claim 1, wherein the card guide is integral to the chassis or attached to an inner wall of the chassis;

wherein the card guide runs from the circuit board entrance of the chassis to a back portion of the chassis to provide an installation path for the circuit board from the circuit board entrance to an engagement with a backplane of the chassis.

37. (new) The apparatus of claim 1, wherein the circuit board comprises a first circuit board, wherein the card guide comprises a bent card guide path, the apparatus further comprising a straight card guide path;

wherein the bent card guide path serves to guide the first circuit board around the obstacle and into the open space in the chassis;

wherein the straight card guide path serves to guide a second circuit board into the chassis without interference from the obstacle.